

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,451	05/06/2004	Robert H. Devine II	839-1306	3450
30024	7590 04/05/2006		EXAMINER	
NIXON & VANDERHYE P.C.			LIN, ING HOUR	
901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203		LOOR	ART UNIT	PAPER NUMBER
	,		1725	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	A   12 - 42 - 14	Anglia and a				
	Application No.	Applicant(s)				
	10/709,451	DEVINE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ing-Hour Lin	1725				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet	with the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUI 1.136(a). In no event, however, may od will apply and will expire SIX (6) M tute, cause the application to become	NICATION. a reply be timely filed  ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 12	. January 2006.					
2a)⊠ This action is <b>FINAL</b> . 2b)□ TI	☐ This action is <b>FINAL</b> . 2b)☐ This action is non-final.					
3) Since this application is in condition for allow	vance except for formal ma	atters, prosecution as to the merits is				
closed in accordance with the practice unde	r <i>Ex par</i> te Quayle, 1935 C	.D. 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 4-13 is/are pending in the application	on.		•			
4a) Of the above claim(s) is/are withd	rawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>4-13</u> is/are rejected.						
7) Claim(s) is/are objected to.		•				
8) Claim(s) are subject to restriction and	i/or election requirement.	•				
Application Papers						
9)☐ The specification is objected to by the Exami	ner.					
10) The drawing(s) filed on is/are: a) □ a	•	•				
Applicant may not request that any objection to the	•		•			
Replacement drawing sheet(s) including the corre	•					
11) The oath or declaration is objected to by the	Examiner. Note the attach	ed Office Action or form P1O-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C	§ 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority docume						
2. Certified copies of the priority docume						
<ul> <li>3. ☐ Copies of the certified copies of the present application from the International Bure</li> </ul>	·	en received in this National Stage	•			
* See the attached detailed Office action for a li	, , , , , , , , , , , , , , , , , , , ,	ot received				
	or or and doraned dopied in	. 10001V04.				
Machine and (a)						
Attachment(s)  Notice of References Cited (PTO-892)	4) 🗀 Intention	y Summary (PTO-413)				
P) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper N	o(s)/Mail Date				
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/C Paper No(s)/Mail Date</li> </ul>	08) 5) ☐ Notice o 6) ☐ Other: _	f Informal Patent Application (PTO-152)				
Deleat and Trickman Office	-,					

Application/Control Number: 10/709,451

Art Unit: 1725

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Correia et al in view of Coulson.

Correia et al (col. 3, lines 64+) teach the claimed casting method and ceramic core for producing a hollow airfoil investment-cast article such as a turbine nozzle 11 by using internal ceramic core 128, shaping a temporary wax form 114 having wax flash ribs 126B at the free end 132 of the core, and external shell 130 and pouring of molten metal into a space created by

Art Unit: 1725

removal of wax form. Correia et al fail to teach the use of internal ceramic core with datum pad and method

However, Coulson (col. 1, lines 47+) teaches the use of datum pad (plastic identification tag 30) and method for the purpose of effectively providing datum pad on a ceramic core for use in casting molten metallic materials having corresponding data (cast geometric features) corresponding to the datum pad on the core. It would have been obvious to one having ordinary skill in the art to provide Correia et al the use of datum pad (plastic identification tag 30) and method as taught by Coulson in order to effectively provide datum pad on the temporary wax flash ribs 126B at the free end 132 of the internal ceramic core for use in casting molten metallic materials having corresponding data (cast geometric features) corresponding to the pad on the core.

### Response to Arguments

4. Applicant's arguments filed 1/12/06 have been fully considered but they are not persuasive. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections because the plastic identification tag 30 of Correia et al is interpreted as the claimed datum pad.

#### Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1725

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ing-Hour Lin whose telephone number is (571) 272-1180. The examiner can normally be reached on M-F (8:00-5:30) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HAd.

I.-H. Lin

KEVIN KERNS Kevin Kema 4/3/06 PRIMARY EXAMINER

3-31-06